

THE OFFICE OF REGULATORY STAFF

DIRECT TESTIMONY OF

MICHAEL L. SEAMAN-HUYNH

OCTOBER 6, 2011



DOCKET NO. 2011-325-E

**Application of South Carolina Electric & Gas Company
for a Certificate of Environmental Compatibility and
Public Convenience and Necessity for the Construction
and Operation of a 230 kV Transmission Line from Its
V.C. Summer Switchyard #1 to Its Killian Transmission
Substation and Two 230 kV Transmission Lines from Its
V.C. Summer Switchyard #2 to Its Lake Murray
Transmission Substation**

**DIRECT TESTIMONY OF
MICHAEL L. SEAMAN-HUYNH**

ON BEHALF OF

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2011-325-E

**IN RE: APPLICATION OF SOUTH CAROLINA ELECTRIC & GAS COMPANY FOR
A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC
CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION AND
OPERATION OF A 230-KV TRANSMISSION LINE FROM ITS V.C. SUMMER
SWITCHYARD #1 TO ITS KILLIAN TRANSMISSION SUBSTATION AND
TWO 230-KV TRANSMISSION LINES FROM ITS V.C. SUMMER
SWITCHYARD #2 TO ITS LAKE MURRAY TRANSMISSION SUBSTATION**

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Michael Seaman-Huynh. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the State of South Carolina as a Senior Electric Utilities Specialist in the Electric Department for the Office of Regulatory Staff ("ORS").

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received my Bachelor's Degree from the University of South Carolina in 1997. Prior to my employment with ORS, I was employed as an energy analyst with a private consulting firm. I joined ORS in 2006 as an Electric Utilities Specialist and was promoted to Senior Electric Utilities Specialist in 2010. I have testified on several

occasions before the Public Service Commission of South Carolina (“Commission”) in conjunction with fuel clause proceedings.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide the results of ORS’s review of the Application (“Application”) of South Carolina Electric & Gas Company (“SCE&G” or “Company”) for a Certificate to construct and operate three 230-kV transmission lines traversing approximately 59 miles in total in Fairfield, Newberry, Richland, and Lexington Counties in South Carolina. The Application was filed pursuant to SC Code §58-33-10 et seq. the Utility Facility Siting and Environmental Protection Act (“Siting Act”) and Commission Regulation 103-304.

Q. PLEASE DISCUSS ORS’S REVIEW OF THE COMPANY’S FILING.

A. In addition to reviewing the Application, ORS attended community workshops hosted by the Company; reviewed each of the 142 completed community surveys received by the Company; met with members of the Company’s transmission planning group to discuss and review the Application; and, examined the additional siting studies and rights-of-way utilization studies performed by the Company.

Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF THE PROPOSED TRANSMISSION FACILITIES.

A. The first of the proposed facilities is a 230-kV transmission line extending approximately 37 miles from the Company’s V.C. Summer Switchyard #1 in Fairfield County to its Killian Transmission Substation in the northeast Columbia area of Richland County (“VCS1-Killian Line”). Thirty-one miles of the line are proposed to be set on

1 existing Company right-of-way. The remaining six miles of the proposed line would be
2 built on new right-of-way ("Blythewood-Killian Segment").

3 The second of the proposed facilities is a 230-kV transmission line extending
4 approximately 22 miles from the Company's V.C. Summer Switchyard #2 in Fairfield
5 County through the eastern part of Newberry and western part of Richland Counties to its
6 Lake Murray Transmission Substation in the northeast Columbia area of Lexington
7 County ("VCS2-Lake Murray Line"). The proposed line would be built entirely on
8 existing Company right-of-way.

9 The third proposed facility is a second 230-kV transmission line running parallel
10 to, and on common double-circuit structures with, the VCS2-Lake Murray Line in its
11 entirety, beginning at the Company's V.C. Summer Switchyard #2 in Fairfield County
12 through the western part of Richland County to its Lake Murray Transmission Substation
13 ("VCS2-St. George Line Segment"). This line is a segment of a longer transmission line
14 that the Company plans to pursue at a later time.

15 **Q. PLEASE DESCRIBE THE INFORMATION REQUIRED BY THE SITING ACT**
16 **TO BE INCLUDED IN AN APPLICATION FOR A CERTIFICATE.**

17 **A.** The Siting Act directs that an application contain a description of the location and
18 the major utility facility(ies) to be built; a summary of any studies which have been made
19 of the environmental impact of the facility(ies); a statement explaining the need for the
20 facility(ies); and such other information as the applicant may consider relevant or as the
21 Commission may require.

1 **Q. DOES THE APPLICATION CONTAIN THIS INFORMATION?**

2 **A.** Yes. A description of the facilities and their locations is presented as well as
3 Siting and environmental reports including the intended use or need for the facilities.

4 **Q. WHAT IS YOUR UNDERSTANDING OF THE BASIS FOR THE NEED FOR**
5 **THESE TRANSMISSION LINES?**

6 **A.** On May 30, 2008, the Company filed a Combined Application for Certificate of
7 Environmental Compatibility and Public Convenience and Necessity for a Base Load
8 Review Order for the construction and operation of two AP-1000 Nuclear Reactors at the
9 Company's existing V.C. Summer Station in Jenkinsville, South Carolina ("Units") with
10 the Commission. The Commission granted the certificate to SCE&G on March 2, 2009
11 in Order 2009-104(A). To support the Units, the Company conducted a comprehensive
12 analysis of its transmission system to ascertain its sufficiency to integrate the anticipated
13 generation from these Units. The Company adheres to the North American Electric
14 Reliability Corporation's ("NERC") Transmission Planning Standards as well as its own
15 Internal Planning Criteria in determining the need for new transmission facilities.
16 Applying these criteria in the analyses, the Company concluded that its existing facilities
17 were not sufficient to support the Units in transferring the power they produce to the
18 Columbia and Charleston load centers. From their analyses, the Company determined
19 that the new transmission lines were the most appropriate solution.

20 **Q. WHAT IS THE PROBABLE ENVIRONMENTAL IMPACT OF THE**
21 **TRANSMISSION LINES?**

22 **A.** The Company conducted a series of comprehensive Siting and Environmental
23 Reports ("Studies") to determine the effect of the proposed transmission lines. These

1 Studies take into consideration the effect of the proposed lines on the environment, as
2 well as, cultural, land use, and scenic resources. The results of the Studies are ranked
3 using a set of nine factors including cultural resources, natural resources, land cover,
4 property ownership, land use, occupied buildings, public visibility, residential visibility,
5 and water quality. The results showed that the transmission lines would not have a
6 significant impact on the environment. The effect on cultural, land use, and scenic
7 resources are also minimized by the proposed routes.

8 **Q. HOW WILL THE 230-KV LINES SERVE THE INTEREST OF SYSTEM**
9 **ECONOMY AND RELIABILITY?**

10 **A.** The Company indicates in the Application as well as testimony that the proposed
11 lines are the most cost effective to serve the system when considering the need to
12 minimize the effects to the environment, land use, cultural resources and aesthetics. In
13 addition, since the lines will be designed to NERC standards to withstand specific events,
14 they will enhance the reliability of SCE&G's system.

15 **Q. PLEASE COMMENT ON THE SITING ACT REQUIREMENT OF**
16 **REASONABLE ASSURANCE THE PROPOSED FACILITY WILL CONFORM**
17 **TO APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS.**

18 **A.** In the Application, the Company affirms that it will conform to all applicable
19 State and local laws and regulations as they pertain to the proposed transmission line
20 facilities.

1 **Q. WERE ANY COMMENTS FILED PERTAINING TO THE COMPANY'S**
2 **REQUEST FOR A CERTIFICATE FOR THE TRANSMISSION LINES?**

3 **A.** ORS is aware of only one set of comments filed by the South Carolina
4 Department of Transportation ("SCDOT"). These comments stated SCDOT had
5 reviewed the Transmission Line Siting and Environmental Reports provided to them by
6 the Company, and that it did not appear that the proposed transmission lines would have
7 any adverse impacts on current SCDOT facilities or projects. No comments were filed
8 by the statutory parties which have expertise in the fields of environment, health,
9 recreation and natural resources and include the SC Department of Health and
10 Environmental Control, the Department of Natural Resources, and the Department of
11 Parks, Recreation and Tourism.

12 **Q. HAS THE COMPANY SECURED THE NECESSARY RIGHTS-OF-WAY FROM**
13 **THE AFFECTED LAND OWNERS ALONG THE TRANSMISSION LINE**
14 **ROUTES?**

15 **A.** The VCS2-Lake Murray Line and VCS2-St. George Line Segment are slated to
16 be built on existing rights-of-way already secured by the Company. No new rights-of-
17 way will need to be established for these two proposed transmission lines.

18 The majority of the VCS1-Killian Line is proposed to be built on existing
19 Company right-of-way as well. This includes 31 of the 37 miles proposed for the
20 transmission line. The remaining 6 miles of the VCS1-Killian Line is proposed to be
21 built on newly established right-of-way. To meet this need, the Company contacted
22 federal, State and local agencies and hosted community workshops in the Siting study
23 area to inform the local population and residents about the project and to solicit

information to assist in the development of the most appropriate route. All landowners in the study area were invited to the workshops by direct mail invitations. The Company determined that rights-of-way on 41 parcels of land were needed to complete the project. As of this writing the Company has acquired 24 of these rights-of-way and is engaged in acquisition negotiations with an additional 7 affected landowners. The Company may initiate condemnation proceedings for the remaining 10 affected landowners if a negotiated settlement cannot be reached.

Q. WHAT DOES THE COMPANY PROPOSE TO DO IF THE REMAINING RIGHTS-OF-WAY IN THE 6 MILES OF THE VCS1-KILLIAN LINE CANNOT BE SECURED ON A SCHEDULE TO SUPPORT THE CONSTRUCTION OF THE UNITS?

A. In its Application, the Company has proposed an alternate route for the 6 miles should this event occur. This alternate route places the VCS1-Killian Line on rights-of-way currently serving an SCE&G 115 kV transmission line.

Q. DOES ORS HAVE ANY RECOMMENDATION WITH REGARD TO THE PRIMARY ROUTE AND THE ALTERNATE ROUTE FOR THE VCS1-KILLIAN LINE?

A. Yes. ORS recommends that the Company's primary route be utilized as proposed. However, recognizing that the Company may not be successful in securing all the necessary rights-of-way for the primary route in a timely manner, ORS recommends that the Commission approve the primary route and the alternate route as proposed by the Company.

**Q. HOW WILL THIS PROJECT AID IN ECONOMIC DEVELOPMENT AND
ATTRACTION AND RETENTION OF JOBS IN SOUTH CAROLINA?**

A. The construction of this transmission line will provide for the safe and economical transfer of electricity to the load centers where it is needed and enhance the reliability of the electrical system in growing areas of the Company's service territory. The result will be a stable supply and delivery of power which enhance economic development.

**Q. WILL THE PUBLIC CONVENIENCE AND NECESSITY BE SERVED BY THE
TRANSMISSION LINES PROPOSED IN THE APPLICATION?**

A. Yes. The proposed transmission lines will not result in significant impacts to the environment, and serve the interests of system economy and reliability. The VCS1-Killian Line, VCS2-Lake Murray Line, and VCS2-St. George Line Segment will support the Units in transferring the power they produce throughout the Company's service territory.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

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THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA
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**CERTIFICATE OF
SERVICE**

This is to certify that I, Pamela J. McMullan, have this date served one (1) copy of the **DIRECT TESTIMONY OF MICHAEL L. SEAMAN-HUYNH** in the above-referenced matter to the person(s) named below by causing said copy to be deposited in the United States Postal Service, first class postage prepaid and affixed thereto, and addressed as shown below:

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Pamela J. McMullan

October 6, 2011
Columbia, South Carolina